

38883 to 38887—Continued. (Quoted notes by Mr. W. W. Mackie.)

sample of the malt, since we are inclined to believe that this barley, under proper conditions as to cultivation and thrashing, would result in good malt. If this barley could possibly be grown on a rich, nitrogenous soil, so that the albumen content could be increased to about 13 per cent, it, in our opinion, would be by far the best barley for malting purposes among the samples sent.' (*Report of Wahl-Henius Institute of Fermentology.*)

"Our field tests show this barley to be very vigorous and hardy, with splendid germination. In height it is about 20 to 30 per cent shorter than the common California 6-rowed barley, but produces thicker and longer heads. It is nearly 3 weeks earlier in maturing. In other words, it is a quicker growing variety. On account of its propensity to rust, I would advise that it be planted inland, away from the influence of the seacoast fogs. It appears to be entirely suited to the arid irrigated regions of the Southwest. All our grains are grown entirely without rain by the aid of irrigation, even to sprouting the seed. The *White Turkestan* yields far better than other varieties tested."

38886 and 38887. *HORDEUM VULGARE NIGRUM* (Willd.) Beaven. **Barley.**

38886. "*Late Black Turkestan* barley gathered in 1911. This barley was secured by me in Samarkand, Turkestan, where the winters are quite severe, with considerable snow. The thermometer often goes far below zero. Our tests at the experiment station show it to be vigorous and hardy, but three weeks later than all other barleys. It behaves much like winter wheat which lies beneath the covering of snow during the winter. This barley would probably do well in the colder regions of the United States. It yields about the same as common or California barley."

38887. "*Early Black Turkestan* barley. This barley is a selection from the Early White Turkestan, which it resembles in every particular except color."

38888. *PERSEA AMERICANA* Miller. Lauraceæ.

(*Persea gratissima* Gaertn. f.)

Murrieta avocado.

From Pasadena, Cal. Presented by Mr. R. J. Mather. Received July 30, 1914.

"The *Murrieta* avocado is the only one of the large-fruited, thick-skinned type that ripens in the fall, as far as the author is aware, and this fact makes it of special importance. Few others are on the market at the same time. It is of the round type and is an ideal shipper. At the present time it is rather difficult to propagate (because the trees are growing in very shallow soil underlain with bedrock, which condition may affect the vigor of the trees and through that the vitality of the buds), but this may be overcome in the future.

"Form, obliquely roundish; length, $3\frac{1}{2}$, diameter $3\frac{1}{2}$ inches; weight, 16 to 20 ounces; apex slightly depressed; base rounded; cavity furrowed, narrow, very shallow, and abrupt; stem stout, truncate; surface undulating to slightly rough; color, yellowish green with numerous medium, rounded, greenish-yellow dots; skin medium thick, tough, finely granular, separating readily from the flesh; flesh creamy yellow, slightly greenish near the skin; texture fine grained,